



Australian Government

AHCSP0309 Process planting seed

Release: 1

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Modification History

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 7.0.

Application

This unit of competency describes the skills and knowledge required to operate seed processing machinery and equipment to clean, grade, and prepare grains and seeds for planting or further pre-planting treatments.

The unit applies to individuals who take responsibility for their own work and for the quality of the work of others. They use discretion and judgement in the selection, allocation and use of available resources. All work is carried out to comply with workplace procedures.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Seed Processing (SPO)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Select and prepare for processing of planting seeds and grains	1.1 Determine seed type, location and volume for processing from work plan and storage schedule 1.2 Confirm seed processing requirements and specifications from work plan 1.3 Confirm transfer and storage requirements of pre and post seed processing according to work plan and seed storage schedule

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
2. Select and prepare seed processing machinery and equipment	2.1 Select, check and use personal protective equipment (PPE) according to workplace health and safety procedures 2.2 Select seed processing machinery and equipment according to work plan 2.3 Prepare seed processing machinery and equipment according to work plan 2.4 Conduct pre-operational checks of machine according to manufacturer specifications, workplace requirements and biosecurity procedures 2.5 Identify work health and safety hazards, assess risk and implement controls 2.6 Calibrate and adjust settings of machinery and equipment to comply with seed processing specifications 2.7 Perform a sample seed run to confirm settings and seed processing performance against specifications according to workplace procedures
3. Operate seed processing machinery and equipment	3.1 Transfer seeds for processing to storage bins and hoppers according to work plan, operator requirements and seed storage schedule 3.2 Use seed processing machinery and equipment safely according to manufacturer operating procedures 3.3 Monitor the performance and efficiency of machinery operation and make adjustments to maintain optimum performance and safety 3.4 Sample and monitor processed seed and make adjustments to machinery to maintain specified quality standards 3.5 Monitor input and output seed storage capacities and implement mitigation procedures to maintain safe and efficient seed storage levels according to workplace procedures and storage schedule
4. Complete seed processing machinery and equipment operation	4.1 Implement seed processing machinery shut-down procedures according to manufacturer specifications and workplace requirements 4.2 Implement operator level maintenance procedures for seed treatment machinery and equipment according to workplace and manufacturer specifications 4.3 Identify and report faults and performance problems of seed processing machinery and equipment according to workplace procedures

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	4.4 Clean, secure and store seed processing machinery and equipment according to biosecurity requirements and to prevent cross contamination
5. Maintain records and reporting for processed seed	5.1 Update records of processed seeds and grains according to workplace procedures 5.2 Update records of seed storage according to storage schedule and workplace procedures 5.3 Identify and report seed processing and machinery irregularities according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret work plans, seed processing quality specifications, seed processing equipment manufacturer specifications and operator instruction
Oral Communication	Use industry language and concepts, and tone and pace appropriate for reporting to supervisor
Numeracy	Adjust and calibrate seed processing machinery and equipment

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCSPO309 Process planting seed	AHCSPO301 Operate a screen cleaner for seed processing	This unit supersedes the following units: AHCSPO301 Operate a screen cleaner for seed processing	Not equivalent

		AHCSPO302 Operate an indent cylinder AHCSPO303 Operate a gravity table AHCSPO304 Operate seed modification machinery AHCSPO306 Operate specialised seed processing machinery	
AHCSPO309 Process planting seed	AHCSPO302 Operate an indent cylinder	This unit supersedes the following units: AHCSPO301 Operate a screen cleaner for seed processing AHCSPO302 Operate an indent cylinder AHCSPO303 Operate a gravity table AHCSPO304 Operate seed modification machinery AHCSPO306 Operate specialised seed processing machinery	Not equivalent
AHCSPO309 Process planting seed	AHCSPO303 Operate a gravity table	This unit supersedes the following units: AHCSPO301 Operate a screen cleaner for seed processing AHCSPO302 Operate an indent cylinder AHCSPO303 Operate a gravity table AHCSPO304 Operate seed modification machinery AHCSPO306 Operate specialised seed processing machinery	Not equivalent

AHCSPO309 Process planting seed	AHCSPO304 Operate seed modification machinery	This unit supersedes the following units: AHCSPO301 Operate a screen cleaner for seed processing AHCSPO302 Operate an indent cylinder AHCSPO303 Operate a gravity table AHCSPO304 Operate seed modification machinery AHCSPO306 Operate specialised seed processing machinery	Not equivalent
AHCSPO309 Process planting seed	AHCSPO306 Operate specialised seed processing machinery	This unit supersedes the following units: AHCSPO301 Operate a screen cleaner for seed processing AHCSPO302 Operate an indent cylinder AHCSPO303 Operate a gravity table AHCSPO304 Operate seed modification machinery AHCSPO306 Operate specialised seed processing machinery	Not equivalent

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>

Assessment Requirements for AHCSPO309 Process planting seed

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Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has on at least one occasion processed planting seed or grains according to a defined quality specification and must include at least 3 of the following processes:

- separated seed from impurities and contaminants
- graded seed by size
- graded seed by weight/density
- graded seed by deformity
- graded seed by colour
- modified seed

There must also be evidence that the individual has:

- identified seed, location and volume requiring processing
- coordinated access and storage of seeds with seed storage schedule
- selected, set up and prepared seed processing machinery and equipment
- fitted and used PPE
- operated seed processing machinery safely within manufacturer specifications and identified irregularities
- complied with biosecurity guidelines to prevent cross contamination
- monitored seed processing and implemented mitigation procedures to maintain quality
- maintained safe and efficient seed storage during processing
- shut down, cleaned and maintained seed processing equipment
- maintained records and reporting according to workplace procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- basic understanding of seed biology in relation to viability and seed cleaning processes

- principles and practices for operating seed processing machinery, including:
 - safety equipment and safe operation of machinery
 - operator servicing and maintenance
 - calibration and settings for quality outcomes of different seed and grain types
- the basic principles of seed processing equipment, their operation and effects on seeds, including:
 - screen cleaners
 - indent cylinder
 - gravity tables
 - airlegs and winnowers
 - seed modification machinery for de-awners, clippers and scarifiers
 - optical/colour sorters
 - floatation tanks
 - magnetic rollers
 - dryers
 - spirals
 - velvet rollers
- workplace health and safety in the seed treatment process, including personal protective equipment (PPE)
- basics of programmable logic controller/treatment control systems and electrical process for seed processing equipment
- operation and maintenance of seed processing machinery
- seed storage requirements and scheduling during seed processing
- biosecurity and cross contamination during seed processing
- seed and grain quality standards affecting seed processing, equipment setup and monitoring
- record keeping and reporting procedures.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in a seed processing plant, a farm or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - seed processing machinery and equipment
 - tools and equipment for calibration and adjustments
 - use of specific items of personal protective equipment
- specifications:
 - workplace procedures

- manufacturer operating instructions for equipment
- workplace instructions and specifications
- relationships:
 - supervisor.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

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